

**AFRD ES&H Operations Committee**  
**71 Conference Room**  
**September 1, 2006**  
**2:00 – 3:00 PM**

**Minutes**

Attendees: Ken Barat, Christine Celata, Daryl Horler, Steve Lidia, Tom Scarvie, Pat Thomas, Csaba Toth

**1. ES&H News and Lessons Learned**

- **New emergency planning manager** – Rocky Saunders has taken the position formerly held by Valerie Quigley. Rocky comes to us from the California Office of Emergency Services. He is already helping with the planning of evacuation routes in the 58 and 71 complexes.
- **Battery Recalls** – Anyone using a Dell or Apple laptop should check the model and serial numbers against the lists of batteries subject to recall. The battery packs can overheat, posing a fire hazard. There is further information in the August IT News.
- **Lessons Learned:** The new “Lessons Learned “ system has been activated and is sending messages to people based on the types of work hazards that they indicated on their JHQs. Following are examples of some recent lessons. The system also allows anyone to submit Lessons Learned or Best Practices that they think would be useful to other Lab employees, or to search for previous lessons on a particular topic. You may find the Lessons Learned home page at:  
<http://www.lbl.gov/ehs/Lessons/index.shtml>
  - **Sharps disposal** – A custodian nearly punctured his finger on a pin-mounted partition hook partially stuck into an old headset that was in a trash container. Anything that could cut or pierce the skin of a person handling the trash should be disposed in a sharps container, not a trash can. Call Marty White if you need assistance.
  - **Oven fire** – A small fire started inside an oven used to bake glassware to remove organic contaminants. A high school student was instructed not to place polypropylene caps into the oven. Caps were placed in the oven mistakenly because the glass containers were wrapped in foil and the student did not realize there were caps under the foil. The student had performed the task before under supervision, but this time there was no supervisor present. This is a reminder to ensure students are supervised when performing potentially hazardous operations.

- **Scaffolding** – A subcontractor was spotted climbing on the outside of the scaffold by Bldg. 26. Work was stopped and a safety meeting was held with the work crew. This is a reminder that there are a lot of construction and maintenance projects going on at LBNL now, including trailer 71E removal, window repair in Bldg. 58, Hilac removal preparations in the 71 highbay, Bevatron deconstruction, and Blackberry gate reconfiguration. If you see any work practices that appear to be unsafe, you have the right to stop work. If you are not comfortable approaching the workers directly, please call EH&S (Tom Caronna) or Division safety staff (Chris Celata or Pat Thomas) immediately and describe what you saw.
- **McCallum-Turner review and AFRD All-Hands** An ISM audit by McCallum-Turner is coming up September 19-27. LBNL had a lot of safety issues last year: an upturn in the accident rate, laser safety findings (in another division), electrical safety incidents, the superglue accident, and ALS radiation safety incidents. Ray Orbach sent a letter to UC Regents demanding improvements in our safety program. In response, LBNL convened a Peer Review in January. The review team identified 13 root causes and we are working on a corrective action plan. The DOE validation of the Peer Review did not go well. DOE has been conducting rigorous audits of the nuclear labs and is starting to audit the science labs. We don't know when our audit will be coming. To get ready, LBNL is bringing in the McCallum-Turner firm to do a review using the DOE audit methodology, based on Integrated Safety Management. We hope to have time to address the findings before the big DOE audit. The auditors were here for a few days for a scoping visit. The auditors may use some ISM terminology that is different from the terms we use. We should be prepared to explain our safety program in our own words and talk about how it addresses the ISM core functions: define work, identify hazards, control hazards, perform work safely, assess performance and respond to feedback. There will be an AFRD All-Hands Safety Meeting on September 12, from 11 AM – noon, in the Bldg. 50 Auditorium, to tell everyone what to expect and help us get ready.

## **2. Laser and Non-Ionizing Radiation Safety – Ken Barat**

Ken Barat left LBNL in June 2002 and returned as our Laser Safety Officer in June 2006. During his time away, he served as the Laser Safety Officer for the National Ignition Facility at LLNL. LBNL's laser safety program has had some problems and there were commitments to DOE to complete corrective actions. On October 24-25, there will be a DOE audit to validate the corrective actions. We don't know how broad the scope of the audit will be. Overall, Ken's impression is that our program is in good condition, although the documentation could be improved. Maintaining the

laser inventory is a challenge because we have frequent changes. Larry McLouth manages the laser database.

Ken has initiated several improvements to the laser safety program:

- He provided stickers to be placed on lasers that are not currently in use. These lasers can also be locked out to prevent unauthorized use.
- The “Laser Safety Awareness” class information has been incorporated in the basic “Laser Safety” class.
- He is posting new warning signs on laser lab doors, which list the wavelengths and the optical density of eyewear, rather than the general type of laser.
- He is encouraging the use of a compliance binder that contains all the safety information for a laser lab, such as the AHD, interlock test procedure and schedule, and emergency information. The binder should indicate that the most up-to-date guidance is on the web.
- He is putting together a “PI’s Guide to Laser Safety” that will explain what a PI needs to do and how to do it. Divisions can add information to their binders.
- He plans to re-write the PUB-3000 laser chapter to ensure the requirements are consistent. He is forming a committee to work on it and is asking for volunteers. This will be a short-term project, not a permanent committee.

Ken has finished all the laser lab visits. He wants to go back to some of the labs to work with the PIs on improvements. He is working on a better way to document his laser lab visits. At the National Ignition Facility, LLNL required posting of “unattended lasers in operation”. Ken is thinking about starting a similar requirement for LBNL. He is reviewing our Work Smart Standards to ensure only the applicable portions are included in the 10 CFR 851 safety plan. He is writing up the interpretations and rationale.

In addition to lasers, Ken is the subject matter expert for non-ionizing radiation, including RF, UV, and magnetic fields. He has a Gauss meter, a laser power meter, and an RF meter (which is being calibrated). He described a Lesson Learned from an August 14 UV exposure at Fermilab. A researcher usually used a UV light to take pictures. The light wasn’t working, so he decided to use a hood that he knew had UV light in it. He thought the light was low-intensity, and the owner of the hood was not around. Later that night, he began experiencing eye and skin burn symptoms that required a trip to the emergency room. Overexposure to UV light produces delayed burn symptoms. Be sure you know the proper procedures and protective equipment before using a UV system.

Ken has made some improvements to ALS laser enclosures. ALS will have a web-based laser safety course soon. It will have some beamline-specific safety information, and is intended for ALS Users. They will be able to complete the training on-line before they arrive. LOASIS prefers to do on-the-job training and orientation for new people, followed by the classroom Laser Safety course. Some CBP people are working in Howard Padmore’s laser lab in Bldg. 2.

### **3. Program Safety Coordinator Status Reports & Forum**

- Supervisor Walkthroughs – At LOASIS, Wim Leemans, Carl Schroeder, and Csaba Toth have been doing their walkthroughs.
- JHQs/Training – We are doing very well on ensuring everyone has completed a JHQ. Now we need to work on encouraging them to attend required training.
- CATS – Supercon has closed out most of their open CATS.

#### **Next Meeting:**

**ES&H Operations Committee – October 6, 2006, 2:00 PM, Bldg. 71 Conference Room**